

<110> GENOMINE INC.

KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY

<120> Polypeptide Having Function of Cinnamyl Alcohol Dehydrogenase, a
Polynucleotide Coding the Polypeptide and Those Uses

<150> KR 10-2004-0013086

<151> 2004-02-26

<160> 6

<170> KopatentIn 1.71

<210> 1

<211> 1205

<212> DNA

<213> Arabidopsis thaliana

<400> 1

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atcgccatcat ggctcgtcaa gttcctactt agccgtggct acactgttaa ggctccgctc 180

cgtgatocca gtgatccgaa aaagacacaa cacttagttt cactagaagg tgcaaaggaa 240

agacttcact tgttcaaagc agaccttttg gaacaagggt ctttcgactc tgctattgat 300

ggttgccatg gagttttcca cactgcttct ccatttttta atgatgccaa agaccacag 360

| | |
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| gctgaactta ttgatcctgc ggtcaagggg acgcttaacg ttttgaattc gtgcgcctaaa | 420 |
| gcctcttcgg ttaagagggg tgttgtaacc tctccatgg ctgccgttgg ttacaatgga | 480 |
| aaaccaogca cacctgatgt taccgtcgat gaaacttggg tctctgatcc tgagctttgc | 540 |
| gaggcctcca agatgtggta tgttctatcc aagactttgg cggaagatgc agcttggaaa | 600 |
| ctcgctaaag agaaaggctt agacattggt actattaacc cggctatggg gatcggctct | 660 |
| ctcctacagc caactctgaa cagagtgct gctgctatat taaacttaat caatgggtgca | 720 |
| aagactttcc caaacttgag tticggatgg gttaatgtaa aagacgtagc caatgcgcac | 780 |
| atccaaacat ttgagggtccc ttacagctaat gggcggtatt gtttggtcga gcgtgtcgtt | 840 |
| caccactccg agattgttaa cattctacgt gagctttacc caaatctccc actacctgaa | 900 |
| aggtgtgtgg acgagaatcc ctacgtgcca acgtatcaag tgtccaagga taaaacgagg | 960 |
| agccttggca tagactacat acccttgaag gttagcatca aggagaccgt cgagtccttg | 1020 |
| aaggaaaaag gtttcgcaca gttctgagaa agcatttgag ccaatggatt taatccagat | 1080 |
| tagataaagt atttgaaga ctatttcaaa aataatattt ggaacatgtc aatgtttctca | 1140 |
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| ctttt | 1205 |

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 <213> Arabidopsis thaliana

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Gly Tyr Ile Ala Ser Trp Leu Val Lys Phe Leu Leu Ser Arg Gly Tyr
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Thr Val Lys Ala Ser Val Arg Asp Pro Ser Asp Pro Lys Lys Thr Gln
 35 40 45

His Leu Val Ser Leu Glu Gly Ala Lys Glu Arg Leu His Leu Phe Lys
 50 55 60

Ala Asp Leu Leu Glu Gln Gly Ser Phe Asp Ser Ala Ile Asp Gly Cys
 65 70 75 80

His Gly Val Phe His Thr Ala Ser Pro Phe Phe Asn Asp Ala Lys Asp
 85 90 95

Pro Gln Ala Glu Leu Ile Asp Pro Ala Val Lys Gly Thr Leu Asn Val
 100 105 110

Leu Asn Ser Cys Ala Lys Ala Ser Ser Val Lys Arg Val Val Val Thr

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Ser Ser Met Ala Ala Val Gly Tyr Asn Gly Lys Pro Arg Thr Pro Asp | | |
| 130 | 135 | 140 |
| Val Thr Val Asp Glu Thr Trp Phe Ser Asp Pro Glu Leu Cys Glu Ala | | |
| 145 | 150 | 155 |
| | | 160 |
| Ser Lys Met Trp Tyr Val Leu Ser Lys Thr Leu Ala Glu Asp Ala Ala | | |
| | 165 | 170 |
| | | 175 |
| Trp Lys Leu Ala Lys Glu Lys Gly Leu Asp Ile Val Thr Ile Asn Pro | | |
| 180 | 185 | 190 |
| Ala Met Val Ile Gly Pro Leu Leu Gln Pro Thr Leu Asn Thr Ser Ala | | |
| 195 | 200 | 205 |
| Ala Ala Ile Leu Asn Leu Ile Asn Gly Ala Lys Thr Phe Pro Asn Leu | | |
| 210 | 215 | 220 |
| Ser Phe Gly Trp Val Asn Val Lys Asp Val Ala Asn Ala His Ile Gln | | |
| 225 | 230 | 235 |
| | | 240 |
| Ala Phe Glu Val Pro Ser Ala Asn Gly Arg Tyr Cys Leu Val Glu Arg | | |
| | 245 | 250 |
| | | 255 |
| Val Val His His Ser Glu Ile Val Asn Ile Leu Arg Glu Leu Tyr Pro | | |
| 260 | 265 | 270 |
| Asn Leu Pro Leu Pro Glu Arg Cys Val Asp Glu Asn Pro Tyr Val Pro | | |

275 280 285

Thr Tyr Gln Val Ser Lys Asp Lys Thr Arg Ser Leu Gly Ile Asp Tyr

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Lys Gly Phe Ala Gln Phe

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<213> Artificial Sequence

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